**HONORS BIOLOGY HOMEWORK QUESTIONS**

Please read page 308-316 of your textbook and answer the following questions on a separate piece of paper in complete sentences.

**SYKC= Share Your Knowledge Challenge- As we review these questions in class, be**

**prepared to be chosen to explain these questions to the class.**

1. Who is Gregor Mendel? Briefly discuss his life.
2. How do pea plants reproduce normally? What is this process called? What do the resulting offspring look like?
3. How did Mendel manipulate the reproduction of pea plants? Why did Mendel do this? What were the resulting offspring like?
4. **SYKC:** Draw two diagrams: one that displays the normal process of pea plant reproduction and one that displays Mendel’s manipulation of the process.
5. Describe the process of Mendel’s experiments with the pea plants. What makes up the P, F1, and F2 generations and what did he obtain for results?
6. What are gametes? Please explain how gametes and segregation are responsible for the reappearance of recessive traits in the F2 generations.
7. Define: homozygous dominant, homozygous recessive, heterozygous, genotype, and phenotype.
8. **SYKC:** When Mendel crossed two plants that were both Tt for stem height, what were his results? Draw a model that displays this cross.
9. What is a Punnett square used for and how is it created?